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Note by the President of the Security Council

At its 6335th meeting, held on 9 June 2010 in connection with the item entitled "Non-proliferation", the Security Council adopted resolution 1929 (2010).

In paragraph 4 of the resolution, the Security Council requested the Director General of the International Atomic Energy Agency to communicate to the Security Council all his reports on the application of safeguards in the Islamic Republic of Iran.

Accordingly, the President herewith circulates the report of the Director General dated 25 May 2012 (see annex).

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Annex

Letter dated 25 May 2012 from the Director General of the International Atomic Energy Agency addressed to the President of the Security Council

I have the honour to enclose herewith the report requested by the Security Council in its resolution 1929 (2010), which I have submitted today to the Board of Governors of the International Atomic Energy Agency (see enclosure).

I should be grateful if you would bring this letter and the enclosed report to the attention of all members of the Security Council.

(*Signed*) Yukiya **Amano**

Enclosure*

Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran

Report by the Director General

A. Introduction

1. This report of the Director General to the Board of Governors and, in parallel, to the Security Council, is on the implementation of the NPT Safeguards Agreement[1] and relevant provisions of Security Council resolutions in the Islamic Republic of Iran (Iran).

2. The Security Council has affirmed that the steps required by the Board of Governors in its resolutions[2] are binding on Iran.[3] The relevant provisions of the aforementioned Security Council resolutions were adopted under Chapter VII of the United Nations Charter, and are mandatory, in accordance with the terms of those resolutions.[4]

3. By virtue of its Relationship Agreement with the United Nations,[5] the Agency is required to cooperate with the Security Council in the exercise of the Council's responsibility for the maintenance or restoration of international peace and security. All Member States of the United Nations agree to accept and carry out the decisions of the Security Council,[6] and in this respect, to take actions which are consistent with their obligations under the United Nations Charter.

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* Circulated to the Board of Governors of the International Atomic Energy Agency under the symbol GOV/2012/23.

[1] The Agreement between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non Proliferation of Nuclear Weapons (INFCIRC/214), which entered into force on 15 May 1974.

[2] The Board of Governors has adopted 11 resolutions in connection with the implementation of safeguards in Iran: GOV/2003/69 (12 September 2003); GOV/2003/81 (26 November 2003); GOV/2004/21 (13 March 2004); GOV/2004/49 (18 June 2004); GOV/2004/79 (18 September 2004); GOV/2004/90 (29 November 2004); GOV/2005/64 (11 August 2005); GOV/2005/77 (24 September 2005); GOV/2006/14 (4 February 2006); GOV/2009/82 (27 November 2009); and GOV/2011/69 (18 November 2011).

[3] In resolution 1929 (2010), the Security Council: affirmed, inter alia, that Iran shall, without further delay, take the steps required by the Board in GOV/2006/14 and GOV/2009/82; reaffirmed Iran's obligation to cooperate fully with the IAEA on all outstanding issues, particularly those which give rise to concerns about the possible military dimensions of the Iranian nuclear programme; decided that Iran shall, without delay, comply fully and without qualification with its Safeguards Agreement, including through the application of modified Code 3.1 of the Subsidiary Arrangements; and called upon Iran to act strictly in accordance with the provisions of its Additional Protocol and to ratify it promptly (operative paras 1-6).

[4] The United Nations Security Council has adopted the following resolutions on Iran: 1696 (2006); 1737 (2006); 1747 (2007); 1803 (2008); 1835 (2008); and 1929 (2010).

[5] The Agreement Governing the Relationship between the United Nations and the IAEA entered into force on 14 November 1957, following approval by the General Conference, upon recommendation of the Board of Governors, and approval by the General Assembly of the United Nations. It is reproduced in INFCIRC/11 (30 October 1959), Part I.A.

[6] The Charter of the United Nations, Article 25.

4. This report addresses developments since the last report (GOV/2012/9, 24 February 2012), as well as issues of longer standing. It focuses on those areas where Iran has not fully implemented its binding obligations, as the full implementation of these obligations is needed to establish international confidence in the exclusively peaceful nature of Iran's nuclear programme.

B. Clarification of Unresolved Issues

5. As previously reported, on 18 November 2011 the Board of Governors adopted resolution GOV/2011/69 in which, inter alia, it stressed that it was essential for Iran and the Agency to intensify their dialogue aimed at the urgent resolution of all outstanding substantive issues for the purpose of providing clarifications regarding those issues, including access to all relevant information, documentation, sites, material, and personnel in Iran. The Board also called on Iran to engage seriously and without preconditions in talks aimed at restoring international confidence in the exclusively peaceful nature of Iran's nuclear programme. In light of this, an Agency team visited Iran for two rounds of talks, in January and February 2012. During the talks: Iran and the Agency were unable to reach agreement on a structured approach[7] to the clarification of all outstanding issues related to Iran's nuclear programme; Iran provided an initial declaration[8] in which it dismissed the Agency's concerns; the Agency presented Iran with initial questions on Parchin and the foreign expert,[9] to which the Agency has yet to receive answers; and Iran stated that it was not able to grant access to the Parchin site.

6. The Director General informed the Board of Governors at its March 2012 meeting that the Agency would continue to address the Iran nuclear issue through dialogue and in a constructive spirit. Immediately following that meeting, further exchanges between the Agency and Iran took place to explore how to continue the talks.

7. Iran and the Agency held a third round of talks in Vienna on 14 and 15 May 2012, during which discussions continued on a structured approach to the clarification of all outstanding issues. Progress was made on a draft document focused on the issues outlined in the Annex to the Director General's November 2011 report. Issues related to the correctness and completeness of Iran's declarations, other than those included in the Annex to the November 2011 report, would be addressed separately. In response to the Agency's request for access to the Parchin site (see paragraph 42 below), Iran stated that such access would not be possible before agreement had been reached on a structured approach.

8. The Director General, in a letter dated 17 May 2012 to H.E. Mr. Saeed Jalili, Secretary of the Supreme National Security Council of Iran, stated that, in light of the progress made on agreeing a structured approach, the circumstances were now right for him to accept Iran's invitation to visit Iran. The Director General stated that

[7] This included issues to be addressed, initial actions and modalities. These modalities related, inter alia, to Iran's security concerns, ensuring confidentiality and ensuring that Iran's cooperation included provision of access for the Agency to all relevant information, documentation, sites, material and personnel in Iran.

[8] The initial declaration was in connection with the issues identified in Section C of the Annex to GOV/2011/65.

[9] As referred to in Section C of the Annex to GOV/2011/65.

the purpose of his visit would be to discuss issues of common interest and, in particular, to conclude the agreement under consideration on a structured approach. In a reply dated 18 May 2012, H.E. Mr. Ali Asghar Soltanieh, Ambassador and Resident Representative to the IAEA, informed the Director General of Iran's affirmative response regarding the visit.

9. On 21 May 2012, the Director General held meetings in Tehran with Mr. Jalili, H.E. Mr. Fereydoun Abbasi, Vice President of Iran and Head of the Atomic Energy Organization of Iran and H.E. Mr. Ali Akbar Salehi, Minister of Foreign Affairs of Iran. During the talks, a number of issues of mutual interest were discussed, in particular the clarification of issues relating to possible military dimensions to Iran's nuclear programme. During the meeting with Mr. Jalili, it was decided to agree on a structured approach. Although some differences between Iran and the Agency remained, on the document resulting from the talks on 14 and 15 May 2012, Mr. Jalili made clear that these were not obstacles to reaching agreement.

C. Facilities Declared under Iran's Safeguards Agreement

10. Under its Safeguards Agreement, Iran has declared to the Agency 16 nuclear facilities[10] and nine locations outside facilities where nuclear material is customarily used (LOFs).[11] Notwithstanding that certain of the activities being undertaken by Iran at some of the facilities are contrary to the relevant resolutions of the Board of Governors and the Security Council, as indicated below, the Agency continues to implement safeguards at these facilities and LOFs.

D. Enrichment Related Activities

11. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran has not suspended its enrichment related activities in the declared facilities referred to below, all of which are under Agency safeguards. According to the latest figures available to the Agency, Iran has produced 6197 kg of UF_6 enriched up to 5% U-235 and 145.6 kg of UF_6 enriched up to 20% U-235 since it began production of such material.[12]

D.1. Natanz: Fuel Enrichment Plant and Pilot Fuel Enrichment Plant

12. **Fuel Enrichment Plant (FEP):** FEP is a centrifuge enrichment plant for the production of low enriched uranium (LEU) enriched up to 5% U-235, which was first brought into operation in 2007. It consists of two cascade halls: Production Hall A and Production Hall B. According to design information submitted by Iran, eight units are planned for Production Hall A, with 18 cascades in each unit. No detailed design information has yet been provided for Production Hall B.

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[10] Since the previous report to the Board (GOV/2012/9), Iran has declared one additional facility, the Fuel Plate Fabrication Plant (FPFP), as indicated in paragraph 38 below. This was the result of an administrative restructuring of ongoing activities that involved no physical changes to Iran's facilities.

[11] All of the LOFs are situated within hospitals.

[12] Some of this material has been further processed, as indicated later in the report.

13. As of 19 May 2012, 54 cascades had been installed in three of the eight units in Production Hall A, 52 of which were declared by Iran as being fed with UF_6. Whereas initially each installed cascade comprised 164 centrifuges, Iran subsequently modified 30 of the cascades to contain 174 centrifuges each. As of 19 May 2012, one additional cascade, also comprising 174 centrifuges, had been installed in a fourth unit in Production Hall A, although it had not been fed with UF_6.[13] Of the remaining 17 cascades in the fourth unit, 16 cascades each had 174 empty IR-1 centrifuge casings placed in position, and the other cascade was empty. All the centrifuges installed in Production Hall A are IR-1 machines. As of 19 May 2012, no centrifuges had been installed in the remaining four units, although preparatory installation work had been completed in one of the units, including the placement in position of empty IR-1 centrifuge casings in all 18 cascades, and was ongoing in the other three units. As of 19 May 2012, there had been no installation work in Production Hall B.

14. As previously reported,[14] the Agency has verified that, as of 16 October 2011, 55 683 kg of natural UF_6 had been fed into the cascades since the start of operations in February 2007, and a total of 4871 kg of UF_6 enriched up to 5% U-235 had been produced. Iran has estimated that, between 17 October 2011 and 11 May 2012, it produced 1326 kg of UF_6 enriched up to 5% U-235, which would result in a total production of 6197 kg of UF_6 enriched up to 5% U-235 since production began in February 2007. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades and the feed and withdrawal stations, are subject to Agency containment and surveillance.[15]

15. Based on the results of the analysis[16] of environmental samples taken at FEP since February 2007[17] and other verification activities, the Agency has concluded that the facility has operated as declared by Iran in the relevant Design Information Questionnaire (DIQ).

16. **Pilot Fuel Enrichment Plant (PFEP):** PFEP is a research and development (R&D) facility, and a pilot LEU production facility, which was first brought into operation in October 2003. It has a cascade hall that can accommodate six cascades, and is divided between an area designated for the production of LEU enriched up to 20% U-235 (Cascades 1 and 6) and an area designated for R&D (Cascades 2, 3, 4 and 5).

17. ***Production area:*** Iran first began feeding low enriched UF_6 into Cascade 1 on 9 February 2010, for the stated purpose of producing UF_6 enriched up to 20% U-235

[13] The 55 installed cascades contained 9330 centrifuges; the 52 cascades declared by Iran as being fed with UF_6 on that date contained 8818 centrifuges. Not all of the centrifuges in the cascades that were being fed with UF_6 may have been working.

[14] GOV/2012/9, para. 14.

[15] In line with normal safeguards practice, small amounts of nuclear material at the facility (e.g. some waste and samples) are not subject to containment and surveillance.

[16] Since the plant was first brought into operation, the Agency has taken a large number of environmental samples at FEP, the results of which have indicated a level of enrichment of uranium of less than 5% U-235. A small number of particles from samples taken in the cascade area continue to be found with enrichment levels of between 5% and 7.4% U-235, which are higher than the level stated in the Design Information Questionnaire (DIQ) for FEP. As noted in GOV/2010/46, paragraph 7, the Agency assesses that these results refer to a known technical phenomenon associated with the start up of centrifuge cascades.

[17] Results are available to the Agency for samples taken up to 18 December 2011.

for use in the manufacture of fuel for the Tehran Research Reactor (TRR).[18,19] Iran has subsequently stated that the purpose is also to produce fuel for the other research reactors it reportedly intends to build.[20] Since 13 July 2010, Iran has been feeding low enriched UF_6 into two interconnected cascades (Cascades 1 and 6), each of which consists of 164 IR-1 centrifuges.[21]

18. As previously reported,[22] the Agency has verified that, as of 13 September 2011, 720.8 kg of low enriched UF_6 produced at FEP had been fed into the cascades in the production area since the process began, and that a total of 73.7 kg of UF_6 enriched up to 20% U-235 had been produced. Iran has estimated that, between 14 September 2011 and 18 May 2012, a total of 269.5 kg of UF_6 enriched at FEP was fed into the two interconnected cascades at PFEP and that approximately 36.4 kg of UF_6 enriched up to 20% U-235 were produced. This would result in a total production of 110.1 kg of UF_6 enriched up to 20% U-235 at PFEP since production began in February 2010.

19. During the period 9-14 April 2012, the operator at PFEP blended approximately 1.6 kg of UF_6 enriched up to 20% U-235 with approximately 7.5 kg of natural UF_6. The product of this down-blending was put into four cylinders, each of which contained approximately 2.1 kg of UF_6 with an enrichment level of 1.5%, 2.4%, 4.6% and 4.7% U-235, respectively. During the same period, the Agency took samples of the UF_6 contained in each of the four cylinders and applied seals.

20. ***R&D area:*** In the area designated for Cascades 2 and 3, Iran has been intermittently feeding natural UF_6 into single machines, 10 machine cascades and 20 machine cascades of IR-1, IR-2m and IR-4 centrifuges. As previously reported,[23] Iran has informed the Agency of its intention to install three new types of centrifuge — IR-5, IR-6 and IR-6s — as single machines in Cascade 2. As of 18 May 2012, no such centrifuges had been installed. As of 6 May 2012, Iran had installed 129 IR-4 centrifuges in Cascade 4.[24] Since 1 March 2012, Iran has been intermittently feeding up to 104 of the centrifuges in Cascade 4 with natural UF_6. Since November 2011, Iran has been intermittently feeding the 164 IR-2m centrifuges in Cascade 5 with natural UF_6, although for a short period it intermittently fed this cascade with depleted UF_6 instead of natural UF_6.

21. Between 12 February 2012 and 18 May 2012, a total of approximately 178.8 kg of natural UF_6 and 11.4 kg of depleted UF_6 was fed into centrifuges in the R&D area, but no LEU was withdrawn as the product and the tails are recombined at the end of the process.

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[18] GOV/2010/28, para. 9.

[19] TRR is a 5 MW reactor which operates with 20% U-235 enriched fuel and is used for the irradiation of different types of targets and for research and training purposes.

[20] Mr. Abbasi reportedly made a statement to the effect that Iran plans to build four to five new reactors in the next few years in order to produce radioisotopes and carry out research ("Iran will not stop producing 20% enriched uranium", Tehran Times, 12 April 2011). He was also quoted by the Iranian Student's News Agency as saying "To provide fuel for these (new) reactors, we need to continue with the 20 per cent enrichment of uranium" ("Iran to build new nuclear research reactors — report", Reuters, 11 April 2011).

[21] GOV/2010/28, para. 9.

[22] GOV/2011/65, para. 15.

[23] GOV/2012/9, para. 20.

[24] Iran had previously indicated its intention to install two 164-centrifuge cascades (Cascades 4 and 5) in the R&D area (GOV/2011/7, para. 17).

22. Based on the results of the analysis of the environmental samples taken at PFEP[25] and other verification activities, the Agency has concluded that the facility has operated as declared by Iran in the relevant DIQ.

D.2. Fordow Fuel Enrichment Plant

23. The Fordow Fuel Enrichment Plant (FFEP) is, according to the DIQ of 18 January 2012,[26] a centrifuge enrichment plant for the production of UF_6 enriched up to 20% U-235 and the production of UF_6 enriched up to 5% U-235. The facility is being built to contain 16 cascades, equally divided between two units (Unit 1 and Unit 2), with a total of approximately 3,000 centrifuges.[27] The plant was first brought into operation in 2011.

24. As previously reported,[28] on 25 January 2012 Iran started feeding UF_6 enriched to 3.5% U-235 into a second set of two interconnected cascades in Unit 2. As of 9 May 2012, Iran had installed all 174 IR-1 centrifuges in each of the fifth and sixth cascades in Unit 2 and had installed 20 IR-1 centrifuges in a seventh cascade in Unit 2. As of 9 May 2012, in the rest of Unit 2 and all of Unit 1, empty IR-1 centrifuge casings had been placed in position and all of the piping had been installed.

25. In a letter dated 7 March 2012, the Agency requested that Iran provide the number and location of cascades at FFEP that would be dedicated to the production of LEU enriched up to 20% U-235. Iran replied, in a letter dated 2 April 2012, that, once the installation of cascades additional to the four currently installed had been completed, the Agency would be notified of "further development" in advance. In a letter dated 21 May 2012, the Agency requested that Iran provide information regarding the purpose for which the fifth and sixth cascades now installed at FFEP are to be used. Iran replied, in a letter dated 23 May 2012, that the installation of centrifuges in the other cascades in Unit 2 (Cascades 5-8) was yet to be completed and that "related utilities may need some months to get ready for commissioning". Iran also stated that the Agency would be notified about the production level of these cascades prior to their operation.

26. The Agency has verified that FFEP is being constructed according to the latest DIQ provided by Iran. As previously reported, Iran provided some information in 2011 regarding the initial timing of, and circumstances relating to, its decision to build FFEP at an existing defence establishment.[29] Nevertheless, additional information from Iran is still needed in connection with this facility, particularly in light of the difference between the original stated purpose of the facility and the purpose for which it is now being used.[30]

27. Iran has estimated that, between 14 December 2011, when feeding of the first set of two interconnected cascades began, and 13 May 2012, a total of 259 kg of

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[25] Results are available to the Agency for samples taken up to 21 November 2011.

[26] To date, Iran has provided the Agency with an initial DIQ and three revised DIQs (GOV/2012/9, para. 24).

[27] GOV/2009/74, para. 9.

[28] GOV/2012/9, para. 26.

[29] GOV/2011/54, para. 26.

[30] GOV/2009/74, para. 14.

UF_6 enriched up to 5% U-235 was fed into the two sets of interconnected cascades at FFEP and that approximately 35.5 kg of UF_6 enriched up to 20% U-235 were produced, of which 25.1 kg has been withdrawn from the process and verified by the Agency.

28. The results of analysis of environmental samples taken at FFEP on 15 February 2012 showed the presence of particles with enrichment levels of up to 27% U-235, which are higher than the level stated in the DIQ. In a letter dated 4 May 2012, the Agency requested that Iran provide an explanation for the presence of these particles. In its reply, dated 9 May 2012, Iran indicated that the production of such particles "above the target value" may happen for technical reasons beyond the operator's control. The Agency is assessing Iran's explanation and has requested further details. On 5 May 2012, the Agency took further environmental samples from the same location where the particles in question had been found. These samples are currently being analysed.

D.3. Other Enrichment Related Activities

29. The Agency is still awaiting a substantive response from Iran to Agency requests for further information in relation to announcements made by Iran concerning the construction of ten new uranium enrichment facilities, the sites for five of which, according to Iran, have been decided.[31] Iran has not provided information, as requested by the Agency in its letter of 18 August 2010, in connection with its announcement on 7 February 2010 that it possessed laser enrichment technology.[32] As a result of Iran's lack of cooperation on those issues, the Agency is unable to verify and report fully on these matters.

E. Reprocessing Activities

30. Pursuant to the relevant resolutions of the Board of Governors and the Security Council, Iran is obliged to suspend its reprocessing activities, including R&D.[33] In a letter to the Agency dated 15 February 2008, Iran stated that it "does not have reprocessing activities". In that context, the Agency has continued to monitor the use of hot cells at TRR and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility.[34] The Agency carried out an inspection and design information verification (DIV) at TRR on 28 April 2012, and a DIV at the MIX Facility on 7 May 2012. It is only with respect to TRR, the MIX Facility and the other facilities to which the Agency has access that the Agency can confirm that there are no ongoing reprocessing related activities in Iran.

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[31] "Iran Specifies Location for 10 New Enrichment Sites", Fars News Agency, 16 August 2010.

[32] Cited on the website of the Presidency of the Islamic Republic of Iran, 7 February 2010, at http://www.president.ir/en/?ArtID=20255 .

[33] S/RES/1696 (2006), para. 2; S/RES/1737 (2006), para. 2; S/RES/1747 (2007), para. 1; S/RES/1803 (2008), para. 1; S/RES/1835 (2008), para. 4; S/RES/1929 (2010), para. 2.

[34] The MIX Facility is a hot cell complex for the separation of radiopharmaceutical isotopes from targets, including uranium, irradiated at TRR. The MIX Facility is not currently processing any uranium targets.

F. Heavy Water Related Projects

31. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran has not suspended work on all heavy water related projects, including the construction of the heavy water moderated research reactor at Arak, the Iran Nuclear Research Reactor (IR-40 Reactor), which is under Agency safeguards.[35]

32. On 16 May 2012, the Agency carried out a DIV at the IR-40 Reactor at Arak and observed that, although construction of the facility was still ongoing, no major components had been installed since the previous DIV. Also on 16 May 2012, the operator informed the Agency that the operation of the IR-40 Reactor was planned to commence in the third quarter of 2013.

33. Since its visit to the Heavy Water Production Plant (HWPP) on 17 August 2011, the Agency has sent three letters to Iran requesting further access to HWPP. The Agency has yet to receive a reply to those letters. Iran also declined the Agency's request made during the aforementioned DIV for access to HWPP. As a result, the Agency is again relying on satellite imagery to monitor the status of HWPP. Based on recent images, the HWPP appears to be in operation. To date, Iran has not permitted the Agency to take samples from the heavy water stored at the Uranium Conversion Facility (UCF).[36]

G. Uranium Conversion and Fuel Fabrication

34. Although it is obliged to suspend all enrichment related activities and heavy water related projects, Iran is conducting a number of activities at UCF, the Fuel Manufacturing Plant (FMP) and the Fuel Plate Fabrication Plant (FPFP) at Esfahan which, as indicated below, are in contravention of those obligations, although the facilities are under Agency safeguards.

35. **Uranium Conversion Facility:** Between 5 and 9 March 2012, the Agency carried out a physical inventory verification (PIV) at UCF, the results of which are now being evaluated by the Agency. Iran has now ceased its R&D activities at UCF involving the conversion of UF_6 enriched up to 3.34% U-235 into UO_2.[37] The Agency has verified that Iran produced 24 kg of uranium in the form of UO_2 during these activities and that 13.6 kg of uranium in the form of UO_2 was subsequently transferred to FMP, where it was used to produce two fuel assemblies, each made of 12 fuel rods, for TRR. As of 13 May 2012, Iran had produced about 1500 kg of natural uranium in the form of UO_2. The Agency has verified that Iran has transferred 758.7 kg of uranium in the form of UO_2 to FMP.

36. On 22 April 2012, Iran introduced into the UCF process area 25 drums containing approximately 6,560 kg of domestically produced uranium ore concentrate (UOC), and 25 drums containing approximately 9,180 kg of UOC taken

[35] S/RES/1737 (2006), para. 2; S/RES/1747 (2007), para. 1; S/RES/1803 (2008), para. 1; S/RES/1835 (2008), para. 4; S/RES/1929 (2010), para. 2.

[36] GOV/2010/10, paras 20 and 21.

[37] GOV/2011/65, para. 34.

from Iran's stockpile of imported UOC.[38] Iran indicated that the UOC from these 50 drums would be mixed together and used for the production of natural UO_2.

37. **Fuel Manufacturing Plant:** On 12 May 2012, the Agency carried out a DIV and an inspection at FMP and confirmed that the manufacture of assemblies made of 12 fuel rods containing UO_2 enriched to 3.34% U 235 had ceased and that the manufacture of pellets for the IR-40 Reactor using natural UO_2 was ongoing. The Agency confirmed that the manufacture of dummy assemblies[39] for IR-40 was continuing.

38. **Fuel Plate Fabrication Plant:** In a letter dated 2 May 2012, Iran informed the Agency that it had decided to combine into one facility the activities involving the conversion of UF_6 enriched up to 20% U-235 into U_3O_8 and the manufacture of fuel assemblies made of fuel plates containing U_3O_8, which at that time were being performed at UCF and FMP, respectively. In the same letter, Iran also provided the initial DIQ for this facility, which it refers to as the Fuel Plate Fabrication Plant (FPFP). A safeguards approach for FPFP was subsequently agreed between the Agency and Iran and is now being implemented. Between the start of conversion activities on 17 December 2011 and 15 May 2012, Iran has fed into the process 43 kg of UF_6 enriched up to 20% U-235 and produced 14 kg of uranium enriched up to 20% U-235 in the form of U_3O_8. On 15 May 2012, the Agency carried out a DIV and an inspection at FPFP and verified two fuel plates and one standard fuel assembly containing 19 plates, all of which were subsequently transferred to TRR. On 20 May 2012, the Agency verified a second standard fuel assembly containing 19 plates prior to its transfer to TRR.

H. Possible Military Dimensions

39. Previous reports by the Director General have identified outstanding issues related to possible military dimensions to Iran's nuclear programme and actions required of Iran to resolve these.[40] Since 2002, the Agency has become increasingly concerned about the possible existence in Iran of undisclosed nuclear related activities involving military related organizations, including activities related to the development of a nuclear payload for a missile, about which the Agency has regularly received new information.

40. The Annex to the Director General's November 2011 report (GOV/2011/65) provided a detailed analysis of the information available to the Agency indicating that Iran has carried out activities that are relevant to the development of a nuclear explosive device. This information, which comes from a wide variety of independent sources, including from a number of Member States, from the Agency's own efforts and from information provided by Iran itself, is assessed by the Agency to be, overall, credible. The information indicates that, prior to the end of 2003 the activities took place under a structured programme; that some continued after 2003; and that some may still be ongoing.

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[38] GOV/2003/75, Annex I, para. 8.

[39] A dummy assembly is similar to a fuel assembly except that it contains non-nuclear material.

[40] GOV/2011/29, para. 35; GOV/2011/7, Attachment; GOV/2010/10, paras 40-45; GOV/2009/55, paras 18-25; GOV/2008/38, paras 14-21; GOV/2008/15, paras 14-25 and Annex; GOV/2008/4, paras 35-42; GOV/2011/65, paras 38-45 and Annex.

41. In resolution 1929 (2010), the Security Council reaffirmed Iran's obligations to take the steps required by the Board of Governors in its resolutions GOV/2006/14 and GOV/2009/82, and to cooperate fully with the Agency on all outstanding issues, particularly those which give rise to concerns about the possible military dimensions to Iran's nuclear programme, including by providing access without delay to all sites, equipment, persons and documents requested by the Agency.[41] In its resolution GOV/2011/69 of 18 November 2011, the Board of Governors, inter alia, expressed its deep and increasing concern about the unresolved issues regarding the Iranian nuclear programme, including those which need to be clarified to exclude the existence of possible military dimensions.

42. In a letter dated 2 May 2012, the Agency reiterated its request that Iran provide the Agency with early access to a specified location within the Parchin site.[42] In the same letter, the Agency informed Iran that, based on satellite imagery, at this location, where virtually no activity had been observed for a number of years, the buildings of interest to the Agency are now subject to extensive activities that could hamper the Agency's ability to undertake effective verification. Since November 2011, the Agency has obtained more information related to the issues associated with the Parchin site, which further corroborates the analysis contained in the Annex to the Director General's November 2011 report.

43. As previously reported,[43] during the second round of talks in Tehran and in response to the Agency's request, Iran provided the Agency with an initial declaration in connection with the issues identified in Section C of the Annex to the Director General's November 2011 report (GOV/2011/65). Iran's declaration dismissed the Agency's concerns in relation to the aforementioned issues, largely on the grounds that Iran considered them to be based on unfounded allegations.

I. Design Information

44. Contrary to its Safeguards Agreement and relevant resolutions of the Board of Governors and the Security Council, Iran is not implementing the provisions of the modified Code 3.1 of the Subsidiary Arrangements General Part to Iran's Safeguards Agreement.[44]

45. Iran last provided the Agency with a DIQ for the IR-40 Reactor in 2006, and in 2007 provided some updated information on the facility. Since that time, Iran has conducted significant additional design and construction work on the reactor, but has not provided further information, as required pursuant to modified Code 3.1 of Iran's Subsidiary Arrangements General Part. The lack of up-to-date information on

[41] S/RES/1929, paras 2 and 3.

[42] With reference to the issues raised in GOV/2011/65, Annex, para. 49.

[43] GOV/2012/9, para. 8.

[44] In accordance with Article 39 of Iran's Safeguards Agreement, agreed Subsidiary Arrangements cannot be changed unilaterally; nor is there a mechanism in the Safeguards Agreement for the suspension of provisions agreed to in the Subsidiary Arrangements. Therefore, as previously explained in the Director General's reports (see, for example, GOV/2007/22, 23 May 2007), the modified Code 3.1, as agreed to by Iran in 2003, remains in force. Iran is further bound by operative paragraph 5 of Security Council resolution 1929 (2010) to "comply fully and without qualification with its IAEA Safeguards Agreement, including through the application of modified Code 3.1".

the reactor is now having an adverse impact on the Agency's ability to effectively verify the design of the facility. In light of this, in a letter dated 2 May 2012, the Agency requested that Iran provide an updated DIQ for the IR 40 Reactor as soon as possible.

46. As previously reported,[45] Iran's response to Agency requests that Iran confirm or provide further information regarding its stated intention to construct new nuclear facilities is that it would provide the Agency with the required information in "due time" rather than as required by the modified Code 3.1 of the Subsidiary Arrangements General Part to its Safeguards Agreement.[46]

J. Additional Protocol

47. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran is not implementing its Additional Protocol. The Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran unless and until Iran provides the necessary cooperation with the Agency, including by implementing its Additional Protocol.[47]

K. Other Matters

48. As previously reported,[48] the Agency found a discrepancy of 19.8 kg between the amount of nuclear material declared by the operator and that measured by the Agency in relation to conversion experiments carried out by Iran at the Jabr Ibn Hayan Multipurpose Research Laboratory (JHL) between 1995 and 2002.[49] As a possible means of addressing the discrepancy, Iran offered to process all of the waste material and to extract the uranium contained therein. In a letter dated 3 April 2012, the Agency explained why it considered that Iran's proposal would not allow resolution of the issue and proposed an alternative method by which to address the discrepancy. Both proposals were discussed by the Agency and Iran in Tehran on 22 April 2012 and consultations are continuing.

49. Iran has continued irradiating the fuel assembly consisting of 14 fuel plates containing U_3O_8 enriched up to 20% U-235. Iran has also continued to use a fuel assembly containing 12 rods of UO_2 enriched to 3.34% U-235 as one of the control assemblies in the core of TRR. In response to a request from the Agency, Iran, in a letter dated 13 March 2012, provided the Agency with information related to the irradiation of nuclear material received from FMP. In a letter dated 19 March 2012, the Agency requested further information, as well as the TRR operator's plans for irradiating such material. The Agency has yet to receive a reply.

[45] GOV/2011/29, para. 37.

[46] GOV/2011/29, para. 37; GOV/2012/23, para. 29.

[47] Iran's Additional Protocol was approved by the Board on 21 November 2003 and signed by Iran on 18 December 2003, although it has not been brought into force. Iran provisionally implemented its Additional Protocol between December 2003 and February 2006.

[48] GOV/2011/65, para. 49.

[49] This material had been under Agency seal since 2003; GOV/2003/75, paras 20-25 and Annex 1; GOV/2004/34, para. 32, and Annex, paras 10-12; GOV/2004/60, para. 33, Annex, paras 1-7; GOV/2011/65, para. 49.

50. As previously reported,[50] Iran has provided the Agency with the commissioning schedule for the Bushehr Nuclear Power Plant (BNPP), which indicated that commissioning activity had commenced on 31 January 2012. On 22 and 23 April 2012, the Agency conducted a PIV at BNPP while the reactor was operating at 75% of its nominal power.

L. Summary

51. While the Agency continues to verify the non-diversion of declared nuclear material at the nuclear facilities and LOFs declared by Iran under its Safeguards Agreement, as Iran is not providing the necessary cooperation, including by not implementing its Additional Protocol, the Agency is unable to provide credible assurance about the absence of undeclared nuclear material and activities in Iran, and therefore to conclude that all nuclear material in Iran is in peaceful activities.[51]

52. Progress was made on a structured approach to clarifying the issues outlined in the Annex to the Director General's November 2011 report. The Director General invites Iran to expedite final agreement on the structured approach, as agreed with Mr. Jalili, in Tehran on 21 May 2012, and urges Iran to engage the Agency on the substance of the issues as soon as possible, including by providing early access to the Parchin site.

53. The Director General urges Iran, as required in the binding resolutions of the Board of Governors and mandatory Security Council resolutions, to take steps towards the full implementation of its Safeguards Agreement and its other obligations, including: implementation of the provisions of its Additional Protocol; implementation of the modified Code 3.1 of the Subsidiary Arrangements General Part to its Safeguards Agreement; suspension of enrichment related activities; and suspension of heavy water related activities.

54. The Director General will continue to report as appropriate.

[50] GOV/2012/9, para. 49.

[51] The Board has confirmed on numerous occasions, since as early as 1992, that paragraph 2 of INFCIRC/153 (Corr.), which corresponds to Article 2 of Iran's Safeguards Agreement, authorizes and requires the Agency to seek to verify both the non-diversion of nuclear material from declared activities (i.e. correctness) and the absence of undeclared nuclear activities in the State (i.e. completeness) (see, for example, GOV/OR.864, para. 49).